DRAFT

Software Version Description for

Electronic Commerce Processing Node

Version 2.2

May 1999

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Software Version Description for ECPN

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1.0 Scope

This Software Version Description (SVD) applies to Version 2.2 of Electronic Commerce Processing Node (ECPN). This document follows the standards set forth in *Military Standard Software Development and Documentation* (MIL-STD-498) and in the *Data Item Description (DID) for a Software Version Description* (DI-IPSC-81442), as tailored by Inter-National Research Institute (INRI).

1.1 Identification

ECPN is a Computer Software Configuration Item (CSCI) of the system identified as Electronic Commerce/Electronic Data Interchange (EC/EDI).

1.2 System Overview

ECPN is being developed by INRI for the Defense Information Systems Agency (DISA). The role of ECPN is to serve as a single interface between the Government and its commercial trading partners for conducting EC/EDI. ECPN must ensure interoperability, economies of scale, and compliance to standards set forth by the Department of Defense (DoD) and Federal Program Office (PO).

The functional objectives of ECPN are to:

- Provide rigorous end-to-end accountability within the ECPN system, with no single point of failure that could result in loss or nondelivery of data
- Implement a Relational Database Management System (RDBMS) for storage of data passing through the ECPN
- Provide automated archive and retrieval mechanisms for messages and system configuration data
- Provide system performance information, including transaction statistics and communications status

1.3 Document Overview

The purpose of this document is to identify and describe the changes made to the ECPN CSCI in Version 2.2. (For descriptions of these changes, see Section 3.3.) This SVD also identifies any software problems that were corrected by the changes made in Version 2.2.

This document contains the following sections:

Scope

States the purpose of the EC/EDI system, describes the role of ECPN within EC/EDI, and states the purpose of this SVD. (Section 1.0)

Referenced Documents

Lists the documents applicable to this SVD. (Section 2.0)

Version Description

Lists the following items: changes made to ECPN for Version 2.2, materials that compose this release of software, OS patches included, possible problems and known errors with ECPN Version 2.2. (Section 3.0)

Notes

Defines the acronyms and abbreviations used in this SVD. (Section 4.0)

2.0 Referenced Documents

The following documents are referenced in this SVD. In the event of a later version of a referenced document being issued, the later version shall supersede the referenced version.

- *Data Item Description - Software Version Description* (DI-IPSC-81442), December 1994.
- *Draft System Administrator's Guide for Electronic Commerce Processing Node*, Version 2.2, INRI, May 1999.
- *Military Standard - Software Development and Documentation* (MIL-STD-498), December 1994.

3.0 Version Description

The following subsections describe ECPN Version 2.2.

3.1 Inventory of Materials Released

The following physical media and associated documentation compose ECPN Version 2.2.

Software

- One tape: *Application Software for Electronic Commerce Processing Node (ECPN) 2.2.*
- One tape: *COE for Electronic Commerce Processing Node (ECPN) 2.2.*
- One tape: *Draft Online Documentation for Electronic Commerce Processing Node (ECPN) 2.2.*
- One tape: *Oracle for Electronic Commerce Processing Node (ECPN) 2.2.*
- One tape: *Translation Maps 1.1 for ECPN Version 2.2.*
- One tape: *Recommended Patches to the HP-UX Version 10.20 OS for ECPN Version 2.2.* (This tape includes fixes for both 700 series machines and 800 series machines.)
- Set of tapes containing: HP-UX Version 10.20 Operating System (OS).

Documentation

- *Draft Documentation Release Notes for Electronic Commerce Processing Node, Version 2.2*, May 1999.
- *Draft Security Manager's Guide for Electronic Commerce Processing Node, Version 2.2,* May 1999.
- *Draft Software User's Guide for Electronic Commerce Processing Node, Version 2.2,* May 1999.
- *Draft System Administrator's Guide for Electronic Commerce Processing Node, Version 2.2*, May 1999.
- *Mapper's Guide for Electronic Commerce Processing Node, Version 2.2*, May 1999.
- *Software Version Description for Electronic Commerce Processing Node, Version 2.2,* May 1999.
- *Software Version Description for Translation Maps Segment, Version 1.1 for ECPN Version 2.2,* May 1999.

3.2 Inventory of Software Contents

This section has been tailored out.

3.3 Changes Installed

The following section describes the software fixes and enhancements that were integrated in ECPN Version 2.2. This information is grouped according to the following categories:

Site Requests/Issues

Some of the software changes integrated in ECPN Version 2.2 were implemented at the request of the ECPN administrators at the DMC sites. Table 3-1 provides a description of these software change requests (SCRs).

Table 3-1 Software Change Requests Submitted by ECPN Administrators

Number	Request/Issue	Refer to
WEG-AR000012617	Overwrite ISA07/08	Communications, 2
WEG-AR000011446	Alphanumeric characters not allowed in DUNS+4 suffix	Translation, 16
WEG-AR000016192	Cannot save a message as a text file from the channel logs	Audit/Logging, 8
WEG-AR000003659	Single errored ISA/IEA causes entire file to fail	Message Processing/ Routing, 4
WEG-AR000017106	997/824 acknowledgments for bisynchronous channels are sent out as multiple instead of batch	Communications, 17
WEG-AR000018482	Message with no element separators causes router to die	Message Processing/ Routing, 8
WEG-AR000016195	When adding a new route, the default criteria should not be set to ALL	Message Processing/ Routing, 9
WEG-AR000016406	997s that are accepted with exceptions do not need to go into the error queue	Message Processing/ Routing, 10

Table 3-1 Software Change Requests Submitted by ECPN Administrators (Continued)

Number	Request/Issue	Refer to
WEG-AR000016407	Request MSN in the incoming and outgoing channel logs	Audit/Logging, 7
HLL000000115638	Need ability to merge communications channel and routing databases	Databases, 1
WEG-AR000003541	Recover COOP data	COOP, 1
WEG-AR000013889	PADDS UDF to X12 translation fails for all addressees if only one is bad	Version 2.1.0.7 (02 April 1999), 1
WEG-AR000017707	Router stops after processing large IPC file	Message Processing/ Routing, 10

Alerts

1. *Problem:* The CHANNEL (KEY) field in the Edit Alert Notification Action window allows the entry of an invalid channel name for channel-based alert types.

   Solution: Modified the CHANNEL (KEY) field so that entries are validated against the communications channel database, and invalid channel names are rejected.

2. *Problem:* Alert notifications for segment terminator alerts list the incoming channel instead of the outgoing channel, even though this alert only applies to outgoing messages.

   Solution: Modified the alert notification for segment terminator alerts to list the outgoing channel.

3. *Problem:* When the check_alerts script determines that the AlertDaemon has stopped responding or is stalled, the warning message erroneously suggests that stopping and restarting the ECPN software will restart the AlertDaemon. Only a system reboot can restart the AlertDaemon.

   Solution: Modified the warning message to suggest rebooting the system to restart the AlertDaemon.

4. *Problem:* For RemoteECPN sessions, changing roles to SA Default or SSO Default on the host machine causes the Alert Log and Alert Display Filter windows to not open.

   Solution: Modified alert modules so that alert information displays for all roles.

5. *Enhancement:* Modified the following windows to use the XMT menu system:

   - Alert Notification Database
   - Edit Alert Notification Message

Audit/Logging

1. *Enhancement:* Ensured that UDF messages are included in traffic reports.

2. *Problem:* The JDS Viewer does not indicate any system alerts associated with a message.

   Solution: Modified the ECPN alert mechanism to record in the JDS Viewer alerts that are associated with messages.

3. *Enhancement:* Modified the Channel File Viewer to allow a message sequence number (MSN) to be selected and viewed in the JDS Viewer.

4. *Enhancement:* Added Select All and Unselect All options to the incoming and outgoing channel logs.

5. *Problem:* The Search window does not provide feedback when a search fails.

   Solution: Added a Search Results field to the Search window to provide feedback on searches.

6. *Enhancement:* Added the ability to search files in the incoming and outgoing channel logs.

7. *Enhancement:* Modified the outgoing channel log to display in a file folder format, as well as show related information such as MSNs and ICNs.

8. *Enhancement:* For the incoming and outgoing channel logs, added the ability to save a selected message to a file.

9. *Problem:* Selecting Pause or Resume in the session log window returns the window to its default size.

   Solution: Modified the session log window to maintain its width and height when Pause or Resume is selected.

10. *Problem:* The daily archive/restore mechanism forces the user to restore the entire contents of a tape, which is very time consuming.

    Solution: Modified the daily archive/restore mechanism to allow the user to choose exactly which data to restore or archive.

11. *Enhancement:* Added the ability to view a raw message in the Out Channel Queue Viewer.

12. *Problem:* Restored daily data is not brought up-to-date until ECPN is started or restarted. The process of bringing the data up-to-date (known as conversion) is time consuming, and the system is not operational during that time.

    Solution: Modified the restore process to bring the data up-to-date before making it available to ECPN. This allows ECPN to remain operational throughout the entire process.

13. *Problem:* The Message Log and Error Queue windows reset the sort order to the default order after the Refresh or Delete commands are issued.

    Solution: Modified the Message Log and Error Queue windows to keep the sort order selected by the user.

14. *Enhancement:* Modified the following windows to use the XMT menu system:

    - Archive/Restore
    - In Channel Log Viewer
    - Out Channel Log Viewer
    - Error Queue
    - Message Log
    - Process Logs
    - Session Logs
    - System Log

15. *Enhancement:* Added the process ID to the session logs and process logs.

16. *Enhancement:* Modified the JDS Viewer and Raw Data Viewer to display line numbers.

Communications

1. *Problem:* The ECPN administrators are not alerted when an email domain (address) cannot be accessed.

   Solution: Added an Edit Domain Threshold dialog box to the Outgoing Email Queues window that allows the user to specify whether an alert should be generated if the system cannot connect to the remote host (domain) after the number of attempts specified in the Connection fail threshold field.

2. *Enhancement:* Added an ISA07/ISA08 OVERWRITE check box to the CONVERSION tab of the edit channel window to indicate whether the ISA07 and ISA08 fields should be overwritten in outgoing messages and to specify the values to use for these fields.

3. *Problem:* The Electronic Commerce Data Warehouse (ECDW) interface cannot transmit data for just a single day.

   Solution: Modified ECDW to accept a date range. If the start and end dates are the same, only that day's data will be transmitted.

4. *Enhancement:* Modified ECDW to allow the user to specify that only message objects for MSNs beginning with a specific site ID character should be transmitted.

5. *Problem:* The ECDW interface fails when a zero-length file is processed or when it closes out a previous day's data.

   Solution: Modified the script to properly handle each of these cases.

6. *Problem:* The emaild process occasionally stops processing and must be restarted by the emaild_snooper program.

   Solution: Corrected some timing problems in emaild that caused it to occasionally stop processing.

7. *Enhancement:* To assist the ECPN administrators in managing the potentially large amounts of channel data that can be displayed in the Communications Manager, the following two graphical user interfaces (GUIs) were added:

   1) A column editor, which allows the columns of the Communications Manager to be rearranged or removed. 2) A layout editor, which allows the ECPN administrators to control the amount of channel data (rows) displayed in the Communications Manager. The layout editor displays only those rows of channel data that meet the criteria defined by the user.

8. *Enhancement:* ECPN communications sessions can now be scheduled to run at specified times of day on specific days.

9. *Problem:* Trigger file names occasionally do not have the same time stamp (e.g., {min}, {sec} variables) as the "push to" file names with which they are associated.

   Solution: Modified the system so that the "push to" file names and trigger file names have matching time stamps.

10. *Problem:* Some message descriptions display unexpected control characters.

    Solution: Modified the message description display mechanism to filter out unwanted control characters.

11. *Enhancement:* Modified the following windows to use the XMT menu system:

    - Communications Manager
    - Communications Status
    - Incoming X12 Queue
    - Incoming Translation Queue
    - Out Channel Queue Viewer
    - Outgoing Email Queues
    - Outgoing Translation Queue
    - Rejected Email

12. *Enhancement:* Renamed the Interface menu option to Communications.

13. *Enhancement:* Renamed the Configure Interface window to Communications Manager and renamed the Interface Status window to Communications Status.

14. *Problem:* As a result of the communication scheduling enhancements (described in 8) executing a ps command does not show the user which communications process is associated with which channel.

    Solution: Created a program, CommsChildrenDB_text, to display which communications process is associated with which channel.

15. *Enhancement:* Added a new file name variable, {cent}, to represent the century.

16. *Problem:* In the Communications Status window, the TOT and BACKLOG values are misleading for email channels.

    Solution: Modified the Communications Status window to display "--" for the TOT and BACKLOG values for email channels. For up-to-date status information for email channels, examine the Outgoing Email Queues window.

17. *Problem:* For CLEO® (bisynchronous) channels, 997/824 acknowledgments are sent out as multiple instead of batch. During outgoing communications batch file creation, system-generated messages such as translation acknowledgments (997s and 824s) cannot be placed into a batch file with other message types. Instead, the batch file creation prematurely terminates, and the next batch file created has a single message in it. Although this problem occurs for all transmit protocols, it is especially noticeable on bisynchronous channels, causing channel backlog because a communications session sends only a single message.

    Solution: Modified the batch file creation logic so that all message types, except message reports, can be batched into the same transmit file.

COOP

1. *Enhancement:* Provided a mechanism for a site to retrieve its data after a COOP.

2. *Enhancement:* After a COOP, duplicate MSNs (one MSN from the site being COOPed and the other from the site performing the COOP) may exist. To avoid problems with duplicate MSNs during data recovery, a site ID character was added to the beginning of the MSN. The new MSN has the format: SNNNNNNNN/YYYMMDD, where S is the site ID. A Site ID field was added to the System Setup window. **Note that before any messages will be processed, you must enter a value in the Site ID field.**

Databases

1. *Problem:* No method exists to automatically merge two communications channel databases or two routing databases that are from the same ECPN version.

   Solution: Wrote a standalone utility (db_merge), which allows users to merge two communications channel databases or two routing databases that are from the same version of ECPN.

2. *Enhancement:* Added the ability to import the communications channel, routing, or trading partner database from a spreadsheet (comma separated variable file). The existing databases may be overwritten or appended, as specified by the user.

3. *Problem:* Message database archives prior to ECPN Version 2.1 cannot be restored.

   Solution: Modified the Restore Message DB script to properly restore pre-2.1 message database archives.

4. *Problem:* The message database cannot be archived for the current date.

   Solution: Modified the archive script to allow archiving specific tables including the current day's tables or archiving all except the current day's message database. In conjunction, if the current day's message database is restored, it will still be included in the cron archive the next day.

5. *Problem:* When archiving the trading partner database, a time-consuming task, the GUI gives no indication that anything is being done.

   Solution: Modified the archive process so that the cursor changes to a watch symbol while the database is being archived.

6. *Enhancement:* Modified the following windows to use the XMT menu system:

   - Routing Database
   - Trading Partner Database

7. *Problem:* The Communications Manager and Routing Database windows reset the column sort order to the default order after the Refresh command is issued.

   Solution: Modified the Communications Manager and Routing Database windows to keep the column sort order selected by the user.

8. *Problem:* In the System Setup window, the Dial Prefix field name is misleading.

   Solution: Changed the field name to Local Prefix to more appropriately describe the function of the field.

9. *Problem:* The System Setup window allows lowercase letters in the ISA05 field.

   Solution: Modified the ISA05 field to allow only uppercase letters and digits.

Message Processing/Routing

1. *Enhancement:* Added a CARBON COPY check box to the Add Routing and Edit Routing windows to enable the ECPN administrators to classify a route as secondary. Secondary routes allow ECPN administrators to designate recipients they wish to receive carbon copies or courtesy copies of messages.

2. *Enhancement:* Implemented the ability to route messages based on the X12 Functional Identifier Code (GS01). Users may create a route and assign up to ten GS01 values to the route.

3. *Enhancement:* Added the ability to reroute, from the message log or error queue, ECPN-generated translation acknowledgments based on the channel's ADMIN tab settings.

4. *Problem:* A multiple-ISA file that contains an ISA message with a partition error causes the system to skip the rest of the messages in the file following that error.

   Solution: Modified the system to attempt to recover from this condition and continue processing any ISA messages that remain after the error.

5. *Problem:* When the parent Router process fails while processing data, the ECPN system no longer processes messages.

   Solution: Modified the system so that the parent processes, such as the Router, do not process data. Instead of processing data itself, the parent process starts subprocesses, which handle the data. This modification eliminates the likelihood of the parent process failing due to data processing problems.

6. *Problem:* The ECPN system cannot process large (greater than 100K) files.

   Solution: Modified the communications and router processes to process large files in pieces, instead of attempting to read the entire file into memory at once.

7. *Problem:* In the routing database, case sensitivity only applies to the VAN/FILE NAME PATTERN field. Discussions with the ECPN administrators indicated that the CASE SENSITIVE check box is no longer needed.

   Solution: Removed the CASE SENSITIVE check box from the Add Routing and Edit Routing windows.

8. *Problem:* A message with no element separators causes the router to stop processing because of assertion statements in the debug code.

   Solution: Stopped delivering debug versions of the software, so assertions will no longer cause processes to stop.

9. *Problem:* When adding a new route, the default matching criteria is set to ALL.

   Solution: Modified the matching criteria to default to ISA/GS.

10. *Problem:* The Router stops after processing a large (29 MB) Integrated Paying and Collecting (IPC) file.

    Solution: It was not the size of the file, but rather the size of an ISA message within the file that caused the Router to stop processing. In order to process an ISA of this size, the system administrator should set the kernel parameter *maxdsize* (max data segment size) to 300,000,000. A software solution to this problem will be addressed in a future version of ECPN.

Miscellaneous

1. *Problem:* Online Help is not available for all ECPN windows.

   Solution: Made the necessary modifications to ensure that online Help is available for all ECPN windows.

2. *Problem:* Through discussions with the site, it was determined that the What's New Help option is not being used.

   Solution: Removed the What's New Help option from the menu.

3. *Enhancement:* Modified the DTG CONVERSION window to use the XMT menu system.

Security

1. *Problem:* Because the file containing the allowed user roles resides in the user's home directory, a user can bypass security and gain access to system roles by modifying that file.

   Solution: Moved the file out of the user's home directory. Access to this file is restricted to the security manager.

2. *Enhancement:* Wrote a security script that provides the settings required by WESTHEM.

3. *Problem:* Users can gain access to ECPN data files, even if they are not the file owner or a member of the ECPN account group.

   Solution: Modified the ECPN data file creation defaults to allow users access to ECPN data files only if they are the file owner or a member of the ECPN account group. ECPN-related files are now created with a umask of 007.

4. *Enhancement:* The first character in FTP account names can now be alphanumeric or non-alphanumeric.

Translation

1. *Problem:* The last character of the Standard Procurement System-Electronic Document Access (SPS-EDA) index file is being truncated.

   Solution: Modified the EDA index file parse logic to ensure proper output of comma separated variable (CSV) files, which fixes the truncation problem.

2. *Enhancement:* Eliminated limits on string lengths within message description files, as well as the limit on the number of message description files.

3. *Problem:* Currently, the list of variables that may be used in generating a push file name (in the FTP TRANSFER tab of the edit channel windows) is static. A map cannot provide a new variable without an ECPN update.

   Solution: Changed the system so that dynamic variables are allowed. A map can define a list of variables in the message description file. The values for the variables are set when translation occurs. This list will be appended to the normal list of variables that are available in the edit channel window for that message type. Thus, a core change is no longer required for a map to provide a new variable for use in push file names. Only a new map segment is required. In support of these changes, transmit file information is now calculated earlier in ECPN processing; and for message objects created after ECPN Version 2.2, each route record reflects only one transmit file, transmit status, and time of transmit.

4. *Enhancement:* The Defense Travel System (DTS) requires headers and trailers to be placed on messages transmitted to them. Added a check box that allows you to enable and disable DTS batch headers and trailers to the CONVERSION tab of the edit channel window.

5. *Enhancement:* Upgraded the Mercator® core Application Programming Interface (API) library from 1.4.03 to 1.4.2 for greater functionality and resolution of some memory problems associated with translation.

6. *Problem:* 838 messages created as a result of translating an 843 message to Standard Army Accounting and Contracting System (SAACONS) format are not properly logged or accounted for within the system.

   Solution: Modified the system to properly log and account for 838 messages created as a result of translating an 843 to SAACONS format. These messages may be viewed and handled like any other message in the system.

7. *Problem:* The LAST MODIFIED column in Trading Partner Database window is not wide enough for whole string of data.

   Solution: Increased the value that determines the LAST MODIFIED column to display the whole data string.

8. *Problem:* Modifying an existing entry in the Trading Partner Database window generates DUPLICATE CAGE CODE errors.

   Solution: Modified the system to check for a DUPLICATE CAGE CODE only when a Commercial and Government Entity (CAGE) code has been added or updated in the trading partner database.

9. *Enhancement:* In preparation for the International Merchants Purchase Authorization Code (IMPAC) map family inclusion, the existing map family names have been renamed to use a -DTS extension to prevent collision.

10. *Enhancement:* In the Add Trading Partner and Edit Trading Partner windows, modified the ISA QUALIFIER field so that all alphanumeric characters entered in the field appear as uppercase.

11. *Enhancement:* In the Message Log window and Error Queue window, changed XLATE TOOLBOX in the menu bar and pop-up menu to Translation Toolbox.

12. *Problem:* A restored trading partner database has missing or incorrect POC and NOTES annotations because these elements are not being archived.

    Solution: Modified the system to archive these annotations. A database archived before this fix will have empty POC and NOTES when restored.

13. *Enhancement:* Modified the system to link incoming 997 acknowledgments, which are destined for the ECPN, to the message they acknowledge (and vice versa) in the JDS Viewer. If a 997 is received that does not match any known message and it was destined for the ECPN, the 997 will fail with the error 997 Unable to Correlate. In conjunction, added a new field in the Admin tab of the System Setup window that specifies how many days back to search before giving up on finding a match for an incoming 997.

14. *Problem:* Currently, message description files are not assigned version numbers. This is a problem because the file format may change with new map families but may remain the same with existing maps.

    Solution: Added version numbers to the message description data structure.

15. *Problem:* Currently, a channel may be configured to route by ISA or ST only if the message type is X12.

    Solution: Modified the edit channel window to give ECPN administrators the ability to direct a channel to route by single ISA, GS, or ST for X12s or UDFs.

16. *Problem:* Alpha characters are not allowed in the last four characters of the 13-character Data Universal Numbering System (DUNS) code.

    Solution: Changed the validation routines to allow alphanumerics in the last four characters.

17. *Problem:* The SAACONS UDF trading partner profile, which accompanies a SAACONS UDF Request For Quotation, is stored as a system-generated message. However, when viewing a generated message through the JDS Viewer, the top (text) pane displays <EMPTY MESSAGE> because there is no X12 content.

    Solution: Modified the JDS Viewer to show the UDF content in the top pane for these system-generated UDFs.

18. *Enhancement:* Modified the ECPN translators to support file locking of translation look-up tables, so that a look-up table to be modified by a map can be locked, thus blocking other maps from accessing it until the modification is complete and the file is stable.

19. *Enhancement:* Acknowledgments are generated from translation audit log information; however, the audit logs do not contain enough information to support Defense Travel System-Common User Interface (DTS-CUI) acknowledgment requirements. Therefore, the ECPN to Mercator interface has been enhanced so that a main translation map can append information directly to the translation audit log and supply the required data for the DTS-CUI acknowledgments.

20. *Enhancement:* In support of the Global Transportation Network (GTN) requirement for data timeliness reports, enhanced the ECPN to Mercator map interface so that a map can request the time-of-receipt of the file being processed.

21. *Enhancement:* Enhanced the ECPN to Mercator map interface to allow a map to request the MSN of the message being translated during outgoing translation. In the future, this enhancement will help correlate translation acknowledgment message content with the original message's MSN.

Updates 2.1.0.5–2.1.0.7

This *Software Version Description* includes all of the updates since the last *Software Version Description for ECPN Version 2.1.0.4*, released in December 1998. These changes were delivered electronically with an accompanying Read Me file. This section lists those updates, grouped by version.

Version 2.1.0.5 Hot Fix (11 January 1999)

1. *Problem:* The router died when processing an IPC file that contained more than 1024 messages.

   Solution: The system's kernel parameters limit the number of open file descriptors that a process may have to 1024. Previously, when processing an IPC file, the router kept all messages in the file open until the processing was complete; therefore, if a file contained more messages than the limit of 1024 file descriptors, the router would die. Modified the router to close each message in the file as it is processed, so that the file descriptor limit is not exceeded.

2. *Problem:* The Electronic Commerce Data Warehouse (ECDW) program stopped transmitting data on 1 January 1999.

   Solution: The ECDW program was not factoring in the new year when calculating whether data was at least five days old. Modified the code to properly handle the new year.

3. *Problem:* Outgoing UDF messages are not MIME encoded.

   Solution: Modified email_send to properly MIME encode messages before transmittal.

Version 2.1.0.6 Hot Fix (03 February 1999)

Problem: Non-EDI vendors received from CCR are not allowed into the Trading Partner database.

Solution: Made the modifications necessary to allow non-EDI vendors into the trading partner database.

Version 2.1.0.7 (02 April 1999)

1. *Problem:* During PADDS UDF to X12 translation of a transaction file designated for multiple addressees, a Trading Partner Database Look-up failure on a single address causes the transaction to fail for all addresses in the file.

   Solution: An additional PADDS premap is now invoked to split the file into a series of single addressee transactions.

2. *Problem:* The PIIN (forth) and SPIIN (fifth) fields of an SPS-EDA index file contain manually entered contract numbers with embedded slash (‘/’) and dash (‘-’) characters. ECPN forwards these fields to EDA channels as received, but the EDA server cannot handle the embedded characters.

   Solution: ECPN now removes the slash and dash characters from the PIIN and SPIIN fields before forwarding an SPS-EDA index file.

3. *Problem:* The Router died when rerouting a sectioned message.

   Solution: Determined that rerouting a member of an IPC sectioned message list instead of the list's leader caused the Router to die. Modified the Router to reference the list's leader when any member of the list is rerouted.

4. *Problem:* Logging out of ECPN while the Help application is active causes the HelpWait process to consume large amounts of processing time.

   Solution: HelpWait was not ensuring that the connection to the MenuExec was still active before trying to send a message to terminate the Help application. Checks are now performed to ensure that a connection is available to the MenuExec.

3.4 Adaptation Data

The ECPN CSCI is the same for all sites. Adaptation of ECPN software is completely driven by configuration files. All adaptation data is stored in files that are read by ECPN when configuring the system for a site. These configuration files are resident on the tape used in the initial installation process.

3.5 Related Documents

In addition to the documents released with ECPN Version 2.2 (listed in Section 3.1), the following documents are pertinent to the ECPN CSCI. In the event of a later version of a document being issued, the later version shall supersede the referenced version.

- *Software Design Description for Electronic Commerce Processing Node, Version 2.1*, INRI, November 1998.
- *Software Requirements Specification for Electronic Commerce Processing Node, Version 2.2*, INRI, April 1999.
- *Software Test Plan for Electronic Commerce Processing Node, Version 2.2*, INRI, April 1999.

3.6 Installation Instructions

This section provides special instructions for installing the operating system (OS) and the ECPN software on Hewlett Packard (HP®) 9000 Series 800 platforms (e.g., K410 and T500) and HP 9000 Series 700 platforms (e.g., J210).

IMPORTANT INSTALLATION NOTES

Before installing ECPN, you should read Section 3.7, Possible Problems and Known Errors, because some of the items listed there may be related to the installation process.

The installation instructions are updated for each new version of ECPN. You should follow these instructions *each time* that you install ECPN to avoid unnecessary complications.

This section contains the following subsections:

3.6.1 Recommended HP OS Patches

IMPORTANT: It is recommended that the HP-UX Version 10.20 Operating System patches listed in Table 3-2 are installed before installing the ECPN Version 2.2 software. Unless otherwise stated, the recommended patches listed in this table are applicable to both HP® 9000 Series 700 and Series 800 platforms. However, note that only those patches that are appropriate for your machine type will be available for installation. Patches that already exist on your machine will not be reloaded.

For instructions on installing these patches, see Section 7.4.1 of the *System Administrator's Guide for Electronic Commerce Processing Node.*

Table 3-2 HP-UX Version 10.X Patches for HP 9000 Series 700 and 800 Platforms

Name	Description	Restrictions
PHCO_9508	Cumulative kermit(1) patch	
PHCO_10175	libc year 2000 white paper	
PHCO_11214	pw_id_map corruption and getspwent loop	
PHCO_12097	newgrp(1) cumulative patch	
PHCO_12140	patch cleanup utility	
PHCO_12236	cumulative SAM trusted user patch	
PHCO_12332	cumulative mediainit patch	
PHCO_13451	grep(1) cumulative patch	
PHCO_13667	ex(1), vi(1), expreserve(1) cumulative patch	
PHCO_13734	passwd(1) cumulative patch	
PHCO_13913	cumulative login patch	
PHCO_14039	Set_parms year 2000 patch	
PHCO_14258	cumulative su patch	
PHCO_14378	mkboot(1M) and rmboot(1M) patch	
PHCO_14645	libc cumulative header file patch	
PHCO_14867	year 2000 fix for power_onoff	800 series platforms only
PHCO_14967	sar(1M) cumulative patch	
PHCO_15218	setup(1M) year 2000 fix	
PHCO_15224	locales Y2K patch	
PHCO_15262	find(1) cumulative patch	
PHCO_15336	tar(1) cumulative patch	
PHCO_16340	HP Disk Array Utilities w/AutoRAID Manager	

Table 3-2 HP-UX Version 10.X Patches for HP 9000 Series 700 and 800 Platforms (Continued)

Name	Description	Restrictions
PHCO_16591	fsck_vxfs(1M) cumulative patch	
PHCO_16612	NetInstall for ACE June '98, plus year 2000	
PHCO_16734	POSIX shell cumulative patch	
PHCO_16752	HPDPS cumulative patch	
PHCO_16964	Year 2000 rcs(1) cumulative patch	
PHCO_17075	Year 2000 cumulative SCCS(1) patch	
PHCO_17187	csh(1) cumulative patch	
PHCO_17240	patch for libportnls.a	
PHCO_17381	libc cumulative patch	
PHCO_17389	LVM commands cumulative patch	
PHCO_17552	Year 2000 cumulative cron/at/crontab patch	
PHCO_17630	Year 2000 nroff(1) cumulative patch	
PHCO_17691	ksh(1) cumulative patch	
PHCO_17815	useradd(1M) cumulative patch	
PHCO_17865	cumulative fbackup(1M) and frecover(1M) patch	
PHCO_17871	cumulative SAM/ObAM patch	
PHCO_17936	date(1) cumulative patch	
PHCO_18131	Year 2000 HP-UX Operating System Patch Tool	
PHKL_12096	scsi1/disc3/disc30 cumulative patch	800 series platforms only
PHKL_12568	panic: alloc_from_pool: no I/O message frames	800 series platforms only
PHKL_12763	HIL uear > 2000, HIL hang, HIL bad packet patch	700 series platforms only
PHKL_12830	s800 10.20 Large data segment performance patch	800 series platforms only
PHKL_13044	SCSI Pass-thru Pseudo Driver cumulative patch	800 series platforms only
PHKL_14282	select() performance; process hang	700 series platforms only
PHKL_14283	missed wakeup in select/real_sleep	800 series platforms only
PHKL_14489	s800 10.20 autochanger panic cumulative patch	800 series platforms only
PHKL_15134	Advanced VxFS B.10.20 cumulative patch	700 series platforms only

Table 3-2 HP-UX Version 10.X Patches for HP 9000 Series 700 and 800 Platforms (Continued)

Name	Description	Restrictions
PHKL_15135	Advanced VxFS B.10.20 cumulative patch	800 series platforms only
PHKL_16750	SIG_IGN/SIGCLD,LVM,JFS,PCI/SCSI cumulative patch	700 series platforms only
PHKL_16751	SIG_IGN/SIGCLD,LVM,JFS,PCI/SCSI cumulative patch	800 series platforms only
PHKL_16869	Datapage fault while moving directories in HFS	700 series platforms only
PHKL_16870	Datapage fault while moving directories in HFS	800 series platforms only
PHKL_16957	Physical dump devices configuration patch	800 series platforms only
PHKL_16959	Physical dump devices configuration patch	700 series platforms only
PHKL_17012	LOFS cumulative patch	700 series platforms only
PHKL_17013	LOFS cumulative patch	800 series platforms only
PHKL_17253	Correct process hangs on ufs inodes	700 series platforms only
PHKL_17254	Correct process hangs on ufs inodes	800 series platforms only
PHKL_17334	fix device swap problems	700 series platforms only
PHKL_17335	fix device swap problems	800 series platforms only
PHKL_17518	JFS Corruption, stack overflow panic patch	700 series platforms only
PHKL_17519	JFS Corruption, stack overflow panic patch	800 series platforms only
PHKL_18197	VxFS (JFS) mount,fsck cumulative patch	700 series platforms only
PHKL_18198	VxFS (JFS) mount,fsck cumulative patch	800 series platforms only
PHNE_9860	megapatch for elm(1)	
PHNE_13413	cumulative patch for kernel portion of Telnet	
PHNE_13414	cumulative telnetd(1M) patch	
PHNE_13597	ftpd(1M) and ftp(1) cumulative patch	
PHNE_13619	r-commands cumulative megapatch	
PHNE_13800	cumulative Mux and Pty patch	
PHNE_14617	BIND 4.9.7 components	
PHNE_15202	STREAMS cumulative patch (include XTI/ TLI)	700 series platforms only
PHNE_15203	STREAMS cumulative patch (include XTI/ TLI)	800 series platforms only
PHNE_15287	ppl(1) cumulative patch	

Table 3-2 HP-UX Version 10.X Patches for HP 9000 Series 700 and 800 Platforms (Continued)

Name	Description	Restrictions
PHNE_15544	kftpd(1M) and kftp(1) cumulative patch	
PHNE_15835	elm(1) supports MIME(RFC 1521/2), JIS	
PHNE_16692	NetTL, Nettladm cumulative patch	
PHNE_16855	mailx(1) cumulative patch	
PHNE_16924	NFS Kernel General Release & Performance Patch	700 series platforms only
PHNE_16925	NFS Kernel General Release & Performance Patch	800 series platforms only
PHNE_16999	LAN products cumulative patch	700 series platforms only
PHNE_17000	LAN products cumulative patch	800 series platforms only
PHNE_17098	NFS/NIS cumulative megapatch	
PHNE_17135	sendmail(1m) 8.8.6 cumulative patch	
PHNE_17730	cumulative ARPA Transport patch	800 series platforms only
PHNE_17731	cumulative ARPA Transport patch	700 series platforms only
PHNE_18061	arp general patch	
PHSS_9397	HP_UX VM for Java environment	
PHSS_12885	CDE localized actions Nov98 periodic patch	
PHSS_14731	HP C++ core library components (A.10.36)	
PHSS_14732	HP C++ (A.10.36) to fix numerous defects	
PHSS_15273	datebook(1) Year 2000 patch	700 series platforms only
PHSS_15314	freedisk(1M) tool Year 2000 patch	
PHSS_16585	HP aC++ runtime libraries (aCC A.01.18)	
PHSS_17156	Xserver cumulative patch	
PHSS_17225	dld.sl(5) cumulative patch	
PHSS_17323	X/Motif Runtime Mar99 Periodic Patch	
PHSS_17534	X11R6 Font Server JAN 99 Cumulative Patch	
PHSS_17566	CDE Runtime Feb 99 Patch	
PHSS_17830	XClients Mar 99 Patch	

3.6.2 Conversion Instructions

No manual data conversions are required for the installation of ECPN Version 2.2.

3.6.3 Installation Instructions

Instructions for installing ECPN are provided in Section 7 through Section 7.4 of the *System Administrator's Guide for Electronic Commerce Processing Node.* These instructions change and thus must be followed *each time* that you install a new version of ECPN.

3.7 Possible Problems and Known Errors

1. *Problem:* Acknowledging alerts in the Non-Urgent Alert window or opening the Alert Display Filter window can occasionally cause the alert GUIs to deadlock.

   Work-around: Exit the Non-Urgent Alert window or the Alert Display Filter window. If the system is not restored to normal, open a terminal window and kill the AlertNonInterrupt process.

2. *Problem:* Acknowledging all red alerts from the Non-Urgent Alert window may result in the ECPN GUIs locking up.

   Work-around: Acknowledge a few of the alerts at a time.

3. *Problem:* The message traffic reports for UDF channels list the incorrect number of ISAs received.

   Work-around: None.

4. *Problem:* The AlertDaemon sometimes stops processing alerts.

   Work-around: Use the check_alerts program to find out if the AlertDaemon has stopped. If the program determines that AlertDaemon has stopped processing, the program suggests a system reboot.

5. *Problem:* For some SAACONS X12 to UDF messages that fail translation, the 997 acknowledgment messages state that they pass.

   Work-around: None.

4.0 Notes

The following acronyms and abbreviations appear in this document:

API: Application Programming Interface

CAGE: Commercial and Government Entity Code

CCR: Central Contractor Registration

COE: Common Operating Environment

CSCI: Computer Software Configuration Item

CSV: Comma Separated Variable

CUI: Common User Interface

DID: Data Item Description

DISA: Defense Information Systems Agency

DLSC: Defense Logistics Services Center

DoD: Department of Defense

DTS: Defense Travel System

DUNS: Data Universal Numbering System

ECDW: Electronic Commerce Data Warehouse

EC/EDI: Electronic Commerce/Electronic Data Interchange

ECPN: Electronic Commerce Processing Node

EDA: Electronic Document Access

FTP: File Transfer Protocol

GTN: Global Transportation Network

GUI: Graphical User Interface

IMPAC: International Merchants Purchase Authorization Code

INRI: Inter-National Research Institute

IPC: Integrated Paying and Collecting

JDS: Journal Data Summary

MIME: Multipurpose Internet Mail Extension

MSN: Message Sequence Number

NEP: Network Entry Point

OS: Operating System

PADDS: Procurement Automated Data and Document System

PO: Program Office

POC: Point of Contact

RDBMS: Relational Database Management System

SAACONS: Standard Army Accounting and Contracting System

SPS: Standard Procurement System

SVD: Software Version Description

TPDB: Trading Partner Database

UDF: User Defined File

VAN: Value Added Network

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